

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20054

In the Matter of)	
)	
The Development of Operational, Technical and)	
Spectrum Requirements for Meeting Federal,)	WT Docket No. 96-86
State and Local Public Safety Communication)	
Requirements Through the Year 2010)	

OPPOSITION OF MOTOROLA, INC.

Motorola, Inc. (“Motorola”) hereby files its opposition to the Petition for Reconsideration in the above-captioned docket by M/A-COM, Inc. (“M/A-COM”).¹ The Fifth Memorandum Opinion and Order in this docket responded to a petition for reconsideration filed by Motorola with respect to certain interim deadlines for the transition to 6.25 kHz voice channels in the 700 MHz band.² Having previously opposed the *Motorola Recon Petition* acted on in the *Fifth MO&O*, M/A-COM now seeks reconsideration of the changes made by the FCC through the *M/A-COM Petition*. As discussed herein, however, the *M/A-COM Petition* fails to provide any basis for revisiting the conclusions of the Commission in the *Fifth MO&O*.

I. INTRODUCTION

The Commission’s *Fifth MO&O* addresses the deadlines for certain aspects of the transition to 6.25 kHz voice channel equipment in the 700 MHz public safety bands. Among other things, the deadlines originally adopted by the FCC in this proceeding required that:

¹ M/A-COM, Inc.’s Petition for Reconsideration of the Fifth Memorandum Opinion and Order, WT Docket No. 96-86 (filed May 27, 2005) (“*M/A-COM Petition*”).

² The Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Communication Requirements Through the Year 2010, *Fifth Memorandum Opinion and Order*, WT Docket No. 96-86 (rel. Jan. 7, 2005) (“*Fifth MO&O*”); see also Petition for Reconsideration filed by Motorola, Inc., WT Docket No. 96-86 (filed Jan. 13, 2003) (“*Motorola Recon*”).

- On December 31, 2006, all new applications for equipment certification in the 700 MHz band must have the capability to use 6.25 kHz voice channels;
- On December 31, 2006, the marketing, manufacture, and importation of equipment capable of 12.5 kHz operation only would be prohibited;
- On December 31, 2006, no new applications for new systems would be accepted using 12.5 kHz technology; and,
- On December 31, 2016, use of 6.25 kHz equipment would be required for all 700 MHz systems.³

While the first and last of these deadlines—the deadlines for type certification and the final transition date—were generally supported by the public safety user community, the interim marketing, manufacture and importation and new system application deadlines were not part of the original APCO/IACP plan and were not generally supported by public safety licensees.

Under these circumstances, Motorola sought revision of the interim deadlines in a petition for reconsideration of the *Fifth R&O*. Motorola explained that the deadlines “provide[] no time to ensure that 6.25 kHz or equivalent systems behave in the real world as envisioned and provides no exceptions for those users who do not need the larger centralized systems that a 6.25 kHz requirement implies.”⁴ Motorola noted in passing that it was “not aware of any credible ongoing development worldwide of digital equipment designed to provide a single voice path within a discrete 6.25 kHz channel,” but the core of its argument was that “public safety users should have the ability to decide whether it is more efficient and suitable for their own needs to retire 12.5 kHz equipment in less than 10 years as opposed to buying first generation, 6.25 kHz compliant technologies that may not have had to be validated in the market.”⁵

³ See The Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Communication Requirements Through the Year 2010, *Fifth Report and Order*, 17 FCC Rcd 14999 (2002) (“*Fifth R&O*”).

⁴ *Motorola Petition* at 5-6.

⁵ *Id.* at 7, 12.

In response, the FCC issued the *Fifth MO&O*, wherein it extended both interim deadlines—respectively banning the marketing, manufacture, and importation of 12.5 kHz equipment and barring new applications for 12.5 kHz systems—until December 31, 2014. Notably, the *Fifth MO&O* explicitly addresses an opposition filed by M/A-COM in the reconsideration proceedings seeking to retain the original interim deadlines set forth in the *Fifth R&O*. Now, through the filing of a petition for reconsideration, M/A-COM requests the Commission revisit its conclusions in the *Fifth MO&O* and reinstate the original interim deadlines. The *M/A-COM Petition*, however, misapprehends the basis of the Commission’s conclusions in the *Fifth MO&O*, and, as discussed herein, its “new” facts are decisionally irrelevant and do not warrant reimposing deadlines found by the Commission to be contrary to the public interest. As discussed herein, the *M/A-COM Petition* should be summarily rejected.

II. THE COMMISSION ACTED APPROPRIATELY IN EXTENDING THE 12.5 kHz DEADLINE

As stated in the *Fifth MO&O*, the Commission’s actions were persuaded by commenters who “do not believe a 6.25 kHz product could be brought to market [by January 1, 2007],” and by public safety’s concerns about “ensuring that new 6.25 kHz equipment is first field-tested under the conditions of public safety operations.”⁶ Thus, the decision to extend the interim deadlines was grounded on the impact to public safety users, with the Commission stating that a “more gradual approach allows entities to transition to narrowband equipment without creating a financial crisis,” and that such an approach avoids facing public safety entities “with the choice of either placing mission critical communications on relatively untested equipment or delaying implementation in the 700 MHz band until such equipment reaches a greater level of maturity.”⁷

⁶ *Fifth MO&O* at ¶12.

⁷ *Id.* at ¶¶13, 14.

M/A-COM argues neither that the Commission acted irrationally based on the information in the record at the time of its decision nor that the Commission ignored key facts in reaching its determination. Instead, M/A-COM implies that the Commission was misled by Motorola's "unsubstantiated" conclusions about competitive efforts to build 6.25 kHz equipment.⁸ However, M/A-COM had every opportunity to inform the FCC of its plans to provide 6.25 kHz equipment, as well as the ability to supplement the record at any time it chose. Indeed, M/A-COM did, in fact, state in its opposition that M/A-COM "could" have 6.25 kHz equipment available by the January 1, 2007, deadline, a statement that was explicitly cited in the *Fifth MO&O*. In short, whether a manufacturer is able to provide 6.25 kHz equipment by the December 31, 2006 deadline was not decisionally significant to the outcome of the Commission's policy determination that public safety users should not be forced to use untested 6.25 kHz starting in 2007. Motorola therefore submits that the Commission acted appropriately in setting a 2014 deadline.

III. DESPITE THE SUBMISSION OF M/A-COM'S "NEW" INFORMATION, THE FCC'S CONCERNS REGARDING EARLY MIGRATION OF PUBLIC SAFETY USERS TO 6.25 kHz CHANNELS REMAIN VALID TODAY

Because M/A-COM has misinterpreted the basis of the Commission's determination to extend the interim deadlines in the *Fifth MO&O*, the "new facts" presented in the *M/A-COM Petition* do not provide any basis warranting reversal of the FCC's decision. Even if a manufacturer could produce 6.25 kHz compliant equipment for the 700 MHz band, it is not a sufficient basis to mandate deployment of that equipment by 2007. There is a far cry between the theoretical production of a certain technology and the widespread availability of multiple

⁸ As previously noted, the Motorola Petition noted only that Motorola was "not aware of any credible ongoing development worldwide of digital equipment designed to provide a single voice path within a discrete 6.25 kHz channel."

public safety products based on that technology that have been field tested to ensure that they are capable of meeting the wide range of public safety needs. Nonetheless, as discussed below and despite M/A-COM's "facts," it is clear that the 6.25 kHz market remains immature, further reinforcing the soundness of the Commission's decision in the *Fifth MO&O*.

Indeed, the Attachments to the *M/A-COM Petition* that are intended to show the availability of 6.25 kHz technology actually highlights the immaturity of the technology for 700 MHz Public Safety systems. For example:

- M/A-COM's referenced "OpenSky Network Accepted and Deployed by Central Arizona Project" operates in the 800 MHz band, not the 700 MHz band at issue in this proceeding.
- The Oakland County and City of Milwaukee systems are also licensed on 800 MHz frequencies.
- The New York Statewide Wireless Network system has been awarded but there has been no public announcement of a contract. As Motorola understands it, New York intends to use both 700 MHz and 800 MHz frequencies, but before 700 MHz frequencies can be used, the broadcast encumbrance issues need to be resolved.
- The ICOM announcement on its face is a technology demonstration. ICOM has followed up with a UHF subscriber unit that has been recently granted 6.25 kHz equipment certification but no "system solution" is yet available. There is no mention of whether the product will support Project 25 trunking protocols, much less 700 MHz operation.

In sum, these "new facts" do nothing to assuage public safety's concern that 6.25 kHz equipment in the 700MHz band be proven in the field before its use is mandated.

Motorola notes that even though the original December 31, 2006, deadline is soon approaching, the only subscriber devices for voice applications that have received FCC authorization to operate in the 700 MHz Public Safety band are 12.5 kHz products. Motorola further notes that standards work for 6.25 kHz technologies has not yet concluded and continues on a global basis. Motorola and other radio equipment manufacturers, including M/A-Com, are participating in two different standards setting activities – TIA in the United States and ETSI in

Europe – and both of these standards bodies are working towards developing a consensus standard based on 2-slot TDMA in 12.5 kHz bandwidth which meets the efficiency standard of one voice channel per 6.25 kHz equivalent bandwidth. These efforts are not yet complete, however, further illustrating the nascent development of 6.25 kHz equivalent technology.

IV. TO THE EXTENT THAT 700 MHz 6.25 kHz EQUIPMENT BECOMES COMMERCIALY AVAILABLE, MANUFACTURERS ARE NOT HARMED BY THE *FIFTH MO&O*

Before and after the issuance of the *Fifth MO&O*, the ultimate date certain for 6.25 kHz operation remains the same—December 31, 2016. As Motorola argued in its petition for reconsideration of the *Fifth R&O* interim deadlines, “public safety entities have a direct economic interest in minimizing their migration costs, consistent with their operational needs, and . . . [those] entities will make rational purchasing decisions that further their best interests.”⁹ Motorola emphasized, however, that “[t]hese decisions *must* be left in the hands of public safety users,” and that “the Commission should allow market forces to shape the phase-out of 12.5 kHz equipment.”¹⁰ Appropriately, the Commission found that the December 31, 2016 deadline standing alone “provides an incentive for all manufacturers to timely develop dual mode equipment and 6.25 kHz equipment.”¹¹

Importantly, the Commission also found in the *Fifth MO&O* that its decision “should not harm manufacturers that develop and offer for sale dual mode equipment or 6.25 kHz equipment in advance [of the deadline].”¹² Should M/A-COM eventually obtain type certification for 700 MHz equipment using 6.25 kHz channels, no prohibition or other rule stands in the way of M/A-

⁹ *Motorola Petition* at 9.

¹⁰ *Id.* (emphasis added).

¹¹ *Fifth MO&O* at ¶13.

¹² *Id.*

COM marketing that equipment to public safety users. The impending final deadline, in fact, virtually guarantees that public safety users will take a long, hard look at 6.25 kHz equipment, if and when it is available, but the mere fact that it is available in some form should not trump the operational, fiscal, and other factors that ultimately guide public safety users' purchasing decisions.

V. CONCLUSION

M/A-COM's attempt to impose artificial deadlines on public safety users should be denied. As Motorola has discussed, the *M/A-COM Petition* introduces decisionally irrelevant "new facts" to justify forcing public safety users into a dilemma between accepting immature equipment or deferring deployment of new systems at 700 MHz. This argument, as Motorola has detailed, misses the basis for the Commission's determination that interim deadlines are unnecessary to ensure a transition to 6.25 kHz by the final cut-over date. On this basis, the *M/A-COM Petition* should be summarily dismissed.

Respectfully Submitted,

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CERTIFICATE OF SERVICE

On September 1, 2005, Motorola served the foregoing document by First Class mail upon the following representatives of M/A-COM, Inc.

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